

CURRENT CLAIMS SCHEDULE:

- 1 1. (Currently Amended) A method for controlling calls in a telecommunication system
2 comprising the steps of:
3 | ~~defining~~ providing a first switching model which does not support self-routing
4 connectionless communications and in which call control signaling and media switching
5 are effectively coupled;
6 | ~~defining~~ providing a second switching model which does support self-routing
7 connectionless communications and in which call control signaling and media switching
8 are effectively decoupled, said telecommunications system being configured to switch
9 ~~substantially~~ no bearer traffic during said second switching model; and
10 at the initiation of a call or during the progress of the call assigning one of said
11 first and second switching models to said call whereby thereafter the call is processed in
12 accordance with the assigned switching model.
- 1 2. (Previously Presented) The method as in claim 1, wherein said telecommunication
2 system is a converged services platform (CSP).
- 1 3. Cancelled.
- 1 4. (Previously Presented) The method as in claim 1, wherein said step of assigning is
2 performed on a call-by-call basis.
- 1 5. (Previously Presented) The method as in claim 1, wherein said step of assigning is
2 performed according to a host message.

- 1 6. (Previously Presented) The method as in claim 5, wherein said step of assigning de-
2 faults to a particular switching model in the event said host message is unavailable.
- 1 7. (Previously Presented) The method as in claim 1, wherein said step of assigning is
2 performed dynamically one or more times during said call.
- 1 8. (Previously Presented) The method as in claim 1, further comprising the step of: pro-
2 viding media resources arranged on a media server.
- 1 9. (Previously Presented) The method as in claim 8, wherein said media resources are
2 selected from a group consisting of: generating tones, detecting tones, providing confer-
3 encing, recording announcements, and playing announcements.
- 1 10. (Previously Presented) The method as in claim 8, wherein said media server is co-
2 located with switching hardware of said telecommunication system.
- 1 11. (Previously Presented) The method as in claim 8, wherein said media server is geo-
2 graphically remote from said switching hardware of said telecommunication system.
- 1 12. (Previously Presented) The method as in claim 1, further comprising the step of:
2 modifying existing telecommunication switching platforms with operating software to
3 meet capabilities of assigning one of said first and second switching models to said call.
- 1 13. (Previously Presented) The method as in claim 1, further comprising the step of: es-
2 tablishing an early media path prior to receiving an answer to said initiation of said call.

- 1 14. (Previously Presented) The method as in claim 13, wherein said early media path
2 plays a recorded announcement.
- 1 15. (Previously Presented) The method as in claim 1, further comprising the step of:
2 transitioning between a 2-way voice path and a 2-way data path during said call.
- 1 16. (Previously Presented) The method as in claim 15, wherein said data path is used for
2 transmitting data from a data communication device.
- 1 17. (Previously Presented) The method as in claim 1, further comprising the step of:
2 augmenting a 2-way voice path with a 2-way data path during said call.
- 1 18. (Previously Presented) The method as in claim 17, wherein said data path is used for
2 transmitting data from a data communication device.
- 1 19. (Previously Presented) The method as in claim 1, wherein said telecommunication
2 system is configured as an interactive voice response (IVR) system.
- 1 20. (Previously Presented) The method as in claim 19, wherein said IVR system pro-
2 vides a prepaid calling service.
- 1 21. (Currently Amended) A method for controlling calls in a telecommunications sys-
2 tem configured as an interactive voice response (IVR) system, said method comprising
3 the steps of:
4 | ~~defining~~ providing a first switching model in which call control signaling and me-
5 dia switching are effectively coupled;
6 | ~~defining~~ providing a second switching model in which call control signaling and
7 media switching are effectively decoupled;

8 at the initiation of a call or during the progress of the call, assigning one of said
9 first and second switching models to said call;

10 providing a two-way RTP voice path from a first session initiation protocol end-
11 point to a second telecommunication system having said interactive voice response sys-
12 tem;

13 establishing a two-way TDM voice path between said interactive voice response
14 system and with said second telecommunication system;

15 obtaining DTMF digits from said interactive voice response system;

16 after information is obtained from said interactive voice response system:

17 i) issuing messages to a second session initiation protocol end-point;

18 ii) establishing a two-way RTP voice path between said first session initiation
19 protocol end-point and said second session initiation protocol end-point;
20 and

21 iii) releasing said channel established between said interactive voice response
22 system and said second telecommunication system; and

23 establishing a two-way RTP voice path between said first end-point and said sec-
24 ond end-point.

1 22. (Currently Amended) A method for controlling calls in a telecommunication system
2 comprising the steps of:

3 | ~~defining~~ providing a first switching model in which call control signaling and me-
4 dia switching are effectively coupled;

5 | ~~defining~~ providing a second switching model in which call control signaling and
6 media switching are effectively decoupled;

7 at the initiation of a call or during the progress of the call, assigning one of said
8 first and second switching models to said call, and wherein assigning said second switch-

9 ing model includes establishing a two-way RTP voice path between a first session initia-
10 tion protocol end-point and a second session initiation protocol end-point, by said tele-
11 communication system performing the following:

- 12 i) receiving a message from said first end-point and in response thereto, issu-
13 ing a Request for Service with a data message to an associated host, with
14 Session Description Protocol data of said first end-point contained within
15 said data message, via an application programming interface with said
16 host;
- 17 ii) receiving a Route Control message generated by said host, and in response
18 signaling a call to said second end-point using an available voice over IP
19 channel;
- 20 iii) issuing to said second end-point an invite message, which includes said
21 first end-point Session Description Protocol as data, and waiting for said
22 second end-point to return a ringing message;
- 23 iv) in response, issuing a ringing message to said first end-point and subse-
24 quently receiving from said second end-point, an OK message indicating
25 that said second end-point is available to accept said call initiated by said
26 first end-point;
- 27 v) issuing a message to said host with information regarding said first and
28 second end-points and waiting for said host to respond with a message in-
29 structing said telecommunication system to process said call in accordance
30 with said second switching model; and
- 31 vi) issuing further messages to establish a two-way RTP voice path between
32 said first and second end-points.

1 23. (Previously Presented) The method as in claim 22, wherein said invite message is a
2 SIP INVITE message.

1 24. (Previously Presented) The method as in claim 22, further comprising the step of:
2 establishing an early media path between said telecommunication system and said host to
3 establish a two-way RTP early voice path between said first and second end-points.

1 25. (Previously Presented) The method as in claim 24, wherein said second end-point
2 plays a recorded announcement via said RTP early voice path.

1 26. (Previously Presented) The method as in claim 25, wherein a media server is acting
2 on behalf of said second end-point.

1 27. (Previously Presented) The method as in claim 22, further comprising the step of:
2 transitioning from said two-way RTP voice path to a two-way RTP data path upon said
3 telecommunication system receiving a re-invite message from said second session initia-
4 tion protocol end-point.

1 28. (Previously Presented) The method as in claim 27, wherein said re-invite message is
2 a SIP RE-INVITE message.

1 29. (Previously Presented) The method as in claim 27, further comprising the steps of:
2 providing an internal media data transfer at said telecommunication system; and
3 issuing a re-invite message to said first end-point, to establish a two-way RTP
4 Data path between said first end-point and said second end-point.

1 30. (Currently Amended) A telecommunication system comprising:
2 switching hardware having circuitry for operating under a first switching model
3 and in which call control signaling and media switching are effectively coupled, and a
4 second switching model which does support self-routing connectionless communications

5 and in which call control signaling and media switching are effectively decoupled, said
6 telecommunication system being configured to switch ~~substantially~~ no bearer traffic; and
7 a processor to assign one of said first and second switching models to said call at
8 the initiation of a call or during the progress of the call so that thereafter the call is proc-
9 essed in accordance with the assigned switching model.

1 31. (Previously Presented) The telecommunication system as in claim 30, wherein said
2 telecommunication system is a converged services platform (CSP).

1 32. Cancelled.

1 33. (Previously Presented) The telecommunication system as in claim 30, wherein said
2 processor assigns said switching models on a call-by-call basis.

1 34. (Previously Presented) The telecommunication system as in claim 30, wherein said
2 processor assigns said switching models in response to a host message.

1 35. (Previously Presented) The telecommunication system as in claim 34, wherein said
2 step of assigning defaults to a particular switching model in the event said host message
3 is unavailable.

1 36. (Previously Presented) The telecommunication system as in claim 30, wherein said
2 processor assigns said switching models dynamically one or more times during said call.

1 37. (Previously Presented) The telecommunication system as in claim 30, further com-
2 prising: a media server for providing media resources.

1 38. (Previously Presented) The telecommunication system as in claim 37, wherein said
2 media resources are selected from a group consisting of: generating tones, detecting
3 tones, providing conferencing, recording announcements, and playing announcements.

1 39. (Previously Presented) The telecommunication system as in claim 37, wherein said
2 media server is co-located with switching hardware of said telecommunication system.

1 40. (Previously Presented) The telecommunication system as in claim 37, wherein said
2 media server is geographically remote from said switching hardware of said telecommu-
3 nication system.

1 41. (Previously Presented) The telecommunication system as in claim 30, further com-
2 prising: operating software for modifying existing telecommunication switching plat-
3 forms to meet capabilities of assigning one of said first and second switching models to
4 said call.

1 42. (Previously Presented) The telecommunication system as in claim 30, wherein an
2 early media path is established prior to receiving an answer to said initiation of said call.

1 43. (Previously Presented) The telecommunication system as in claim 42, wherein said
2 early media path is utilized for playing a recorded announcement.

1 44. (Previously Presented) The telecommunication system as in claim 30, wherein said
2 switching hardware transitions between a 2-way voice path and a 2-way data path during
3 said call.

1 45. (Previously Presented) The telecommunication system as in claim 30, wherein said
2 switching hardware augments a 2-way voice path with a 2-way data path during said call.

1 46. (Previously Presented) The telecommunication system as in claim 44, wherein said
2 data path is used for transmitting data from a data communication device.

1 47. (Previously Presented) The telecommunication system as in claim 30, wherein said
2 telecommunication system is configured as an interactive voice response (IVR) system.

1 48. (Previously Presented) The telecommunication system as in claim 47, wherein said
2 IVR system provides a prepaid calling service.

1 49. (Currently Amended) A telecommunication system comprising:

2 | means for ~~defining~~ providing a first switching model which does not support self-
3 routing connectionless communications and in which call control signaling and media
4 switching are effectively coupled;

5 | means for ~~defining~~ providing a second switching model which does support self-
6 routing connectionless communications and in which call control signaling and media
7 switching are effectively decoupled, said telecommunications system being configured to
8 support ~~substantially~~ no bearer traffic during said secondary switching model; and

9 | means for assigning one of said first and second switching models to said call at
10 | the initiation of a call or during the progress of the call so that thereafter the call is proc-
11 | essed in accordance with the assigned switching model.